JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

August 29, 2007

Robert Hicken
Mountain Valley Stone, Inc.
P.O. Box 985
2275 South Daniels Road
Heber City, Utah 84032

Subject: Second Review of Revised Notice of Intention to Commence Large Mining Operations, Mountain Valley Stone, Inc., Browns Canyon Quarry, M/043/019, Task # 1763, Summit County, Utah

Dear Mr. Hicken:

The Division has completed our second review of your draft Notice of Intention to Commence Large Mining Operations for the mine, located in Summit County, Utah. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed below under the applicable Minerals Rule heading. Please address only those items requested in the attached technical review. Send replacement pages of the original notice **using redline and strikeout text** and indicate how these are to be incorporated into the current approved plan using Form-MR-REV-att found on the Divisions web page. After the notice is determined technically complete you will be asked to send us two clean copies of the complete and final Notice of Intention; one copy will be returned to you for your records.

The Division requests that submittals are made according to the following format. Notices and changes should be three hole punched, maps folded and placed in a plastic 8 ½ by 11 sleeve, and binders provided for new notices, revisions, applications, or other changes of 30 pages or more (binders need only be provided once). Applications should not be bound.

If you have any questions in this regard please contact me at (801) 538-5258 or Lynn Kunzler at 538-5310. If you wish to discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action. In reply, please refer to file M0430019.

Sincerely,

for Daron R. Haddock

Susan M. White
Mining Program Coordinator
Minerals Regulatory Program

SMW:lk:pb
Attachment: Review, Form MR-REV-att
P:\GROUPS\MINERALS\WP\M043-Summit\M0430019-BrownsCyn-MVS\Final\Rev-REVIEW2-08202007.doc

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
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UTAH DNR OIL, GAS & MINING

SECOND REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Mountain Valley Stone, Inc.
Brown's Canyon Quarry

M/043/019
August 29, 2007

R647-4-105 - Maps, Drawings & Photographs

105.1 Topographic base map, boundaries, pre-act disturbance
The maps do not clearly show the areas and acres to be disturbed or that are currently disturbed. The original 2002 application had a map SP-1 at 1 inch equals 60 feet with clear labeling of mine areas, storage areas, diversion ditches, etc. The hatched areas on the more recent figures 1 and 2 are labeled but the labels are hard to read as they get lost in the hatching. Figure SP-1 in the original plan, but now eliminated, described and showed in better detail and was also at a scale of 1inch equals 60 feet. This level of detail was not transferred onto the more recent maps or was left off entirely. The location of what areas are to be mined on figures 1 and 2 are not clearly labeled. Please label these figures with the level of detail of information found on figure SP-1.
What appears as the five year mine plan area on figure 2 is highlighted in yellow and is 33 acres. Within that 33 acres is a product stockpile area, (2) topsoil storage areas, a material processing and storage area, and a wetland area. It is unclear what area is to be mined within the yellow highlighted area as nothing is labeled in this regard. Please show this on Figure 2. (TM)

105.2 Surface facilities map
This map does not show the location of the overburden/waste piles. Please add these features to maps SP3, Fig. 1 and Fig. 2 (lk)

Please show on a map the approximate location and extent of the area that will actually be mined, locations of any proposed highwalls, overburden and waste piles, roads, and other type(s) of impacts or disturbance that will occur over the proposed expansion area. (lk)

105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)
Cross-sections through the expansion area should be included showing the original surface, surface after mining and surface after reclamation. A minimum of two sections should be submitted, one in a east-west and one in a north- south direction. (lk)

The Site Reclamation Maps (SP 2 and SP-3) for the site need to identify where the several different reclamation treatments, listed on these maps, will be used (please refer to comments under R647-4-110.5). (lk)

R647-4-106 - Operation Plan

107.1 *Drainages to minimize damage*

The plan and figure SP-1 from the original plan shows a 10-foot ditch and embankment for storm water detention and erosion control on the down gradient side of the property or lot 37 but makes no mention of how this will be constructed and maintained during operation. Please elaborate on the functionality of this drainage control during operations and how it will handle surface water runoff. It appears to run down a hill with no outlet. Perhaps a check dam or sediment pond structure to treat storm water at this downhill point would be appropriate. Since Lot 26 is going to be developed, please elaborate on treatment of runoff and erosion control from this area as well. (TM)

107.2 Erosion control & sediment control

The check dam placement on Figure SP-3 does not make sense. The check dams appear to be in locations unrelated to channels. What is the criteria for placing check dams both operationally and during reclamation. A question was asked on the last review and about erosion in diversion ditches, no response was given and Figure SP-1 was eliminated that showed the diversion ditch. Please elaborate on what your intentions are in regards to erosion control. (TM)

106.3 Estimated acreages disturbed, reclaimed, annually.

From Fig. 2, it appears that the total permitted area will be 58.5 acres. Please identify how much of this acreage will not be disturbed (i.e. the wetland area and buffer zone around this area). What will be the total acreage to be disturbed with this revision (include current permit area as well as expansion area). (lk)

106.8 Depth to groundwater, extent of overburden, geology

It shows a new location of the well site on figure 2. What is the depth to groundwater and the relationship between the water level in the wetlands and the geologic formation in which the well will be developed? (TM)

106.9 *Location & size of ore, waste, tailings, ponds*

Location and size of overburden/waste piles for the expansion area are not shown on any of the maps. Please provide a map showing the location of these features (refer to comments under R647-4-105.2). (lk)

107.3 *Drainages to minimize damage*

The original plan showed a 10-foot ditch and embankment for storm water detention and erosion control on the down gradient side of the lot 37 but makes no mention of how this will be constructed and maintained during operation. Please elaborate on the functionality of this drainage control during operations and how it will handle surface water runoff. It appears to run down a hill with no outlet. Perhaps a check dam or sediment pond structure to treat storm water at this downhill point would be appropriate. Since SP-1 has been eliminated and it was the only figure to show this control, why has the diversion not been

shown on SP-2. (TM)

107.4 Erosion control & sediment control
The check dam placement on Figure SP-3 does not make sense. The check dams appear to be in locations unrelated to channels. What is the criteria for placing check dams both operationally and during reclamation. A question was asked on the last review about erosion in diversion ditches, no response was given and Figure SP-1 was eliminated. Please elaborate on what your intentions are in regards to erosion control. (TM)

R647-4-108 - Hole Plugging Requirements

The plan indicates that the water well drilled on site will be properly plugged upon abandonment. The surety calculation will need to include this as a line item. (lk)

R647-4-109 - Impact Assessment

109.1 Impacts to surface & groundwater systems
The impacts to surface and ground water has not been properly discussed in the updated plan. How will mining and reclamation stay away and protect designated wetlands. What are the drilling parameters for the water well shown on figure 2. What formation will it be drilled into and what is the water right associated with this well. (TM)

R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed
With regards to reclamation of dump slopes, the operator needs to be aware that to push these dumps to 3h:1v slope will expand the footprint. Dumps will need to be constructed with a 3h:1v slope, or kept at sufficient distance from the wetlands so that the wetland buffer will not be impacted during reclamation. (lk)

110.5 Revegetation planting program
Portions of the 'revegetation specifications' listed on maps SP2 and SP3 conflict with the approved reclamation plan. For example, the seeding window should be October 1 – November 15. Describe the 'irrigation' work (under PREPARATION) – currently there are no approved plans for irrigation. Explain why the 'Owner' needs to approve changes to the seeding window or topsoil replacement and be notified '7 days prior to seeding' (and not the Division). Why is hydro-seeding discussed when it is not in the plan as an approved seeding method (including mixing wood-fiber mulch with the seed)? 'tracking', raking, or dragging a chain to incorporate seed is not appropriate. These practices to flatten or smooth the ground surface. It has been found that leaving the surface in a very roughened condition improves vegetation establishment and reduces erosion. Steep slopes should be pitted or gouged, flatter slopes should be ripped (1-2 foot depth) on the contour just prior to seeding.

Please correct the 'revegetation specifications' listed on these two maps to accurately describe the approved plan (or simply reference the approved plan). (lk)

R647-4-113 - Surety

Before the amount of additional reclamation surety can be calculated, you will need to provide specific details regarding:

- Volume of waste/overburden that needs to be moved and the average distance to be moved (can it be regraded with a dozer, or will it need to be loaded on trucks to haul to different locations on the mine site).
- Cross sections of the mine site, showing the mined out grade as well as the reclaimed grade.
- Size of buildings, concrete pads, and other features that will need to be removed.
- Size of pits (quarry areas), pads, work areas, etc. that may require different reclamation treatments.
- Acreages that will receive different reclamation treatments (i.e. different soil depths, amendments, ripping/regrading, etc.

The attached copy of the Bond Estimate lists the reclamation tasks that need to be preformed. It includes a list of the tasks currently required, the unit basis of the cost (i.e. hours, cubic yards, etc. the # of units for each task, and the Division's current cost for each unit. Also added are tasks previously not included but are now considered necessary based on the proposed revision (i.e. well plugging). Please review each item an amend the # of units to reflect reclamation of expansion area.

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